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TITLE:

LIQUID CRYSTAL CELL CUTTING METHOD

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ABSTRACT:

PROBLEM TO BE SOLVED: To properly cut off liquid crystal cells without

generating a breaking and an oblique crack in glass substrates by marring a

scribe scratch on the surface of a side in which transparent electrodes

formed of two sheets of glass substrates, forming half-cuts at positions corresponding to the scribe scratch of the outside surfaces of an assembly and

applying a load on them.

SOLUTION: A scribe scratch 11 is marred on the surface of the side in which

transparent electrodes 3, 4 are formed at the cut scheduled position of the

glass substrate 1 of one side by using a scriber in a scribing process 103. Continuously, an assembly 16 is formed by opposing two sheets of glass substrates 1, 2 in an assembling process 104. Half-cuts 17, 18 are formed at

positions corresponding above and below the scribe scratch 11 on the outside

surfaces of the upper and lower glass substrates 1, 2 in the assembly 16 in a

half-cutting process 105. Thereafter, in a breaking process 106, the load of

the vertical direction is applied to reaming parts of the glass substrates 1,2

by pressing a pressing body 19 onto the parts from the upward to cut off the

upper and lower glass substrate 1, 2 simultaneously.

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4	22	"5410423"	USPAT; US-PGPUB;	2003/06/11 17:30
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11	,	"4875086" "4910165" "4925805" "5206749").PN.	USPAI	17:28
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21	238	scribe\$2 near5 crack\$2	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/06/11 17:33
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-	25	scribe\$2 adj crack\$2	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/11 17:32
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_	204	crack\$3 and (((219/121.72) or (219/121.69)).CCLS.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/06/10 16:13
-		crack\$3 same substrate\$2	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/10 16:13
-	59	(crack\$3 same substrate\$2) and (((219/121.72) or (219/121.69)).CCLS.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/06/10 16:54